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Conference Abstract

Turning Flickr into a useful Citizen Science Resource

Arthur D Chapman ‡

‡ Australian Biodiversity Information Services, Ballan, Vic., Australia

Corresponding author: Arthur D Chapman (biodiv_2@achapman.org)

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Abstract

Flickr is a photo and web hosting social media site created by Ludicorp in 2004 and later (in 2005) acquired by Yahoo. It is largely used by people for hosting social media type photos, but through the judicious use of Tagging (including use of machine tags), APIs, grouping, tag indexing and georeferencing it has been turned into a powerful citizen science resource.

By 2015, it was estimated that there were over 10 billion images on Flickr, and there are millions of biodiversity-related images posted. Flickr provides for the creation of 'Groups' and for example, the 'Bird Photo Group' alone has over 2.7 million photographs. Of course, not all biodiversity images are named and identified, or georeferenced (although many are), but many of the Flickr Groups have established rules that allow easy identification of images with names, through tagging and machine tagging. Flickr also includes an in-house georeferencing tool, and georeferences can also be added through machine-tagging.

Data Quality is always an issue with any Citizen Science initiative, and identification from images can often be problematic. Many Flickr Groups, however, have scientists as members and these will often interact with the photographer to help identify species. At other times, through the image comments, mis-identifications are queried and suggested corrections made. Thirdly, there are several Flickr Groups established where photographers can place images they are unsure of and ask for identification advice.

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In this paper, I will give several examples of Flickr Groups that are using innovative techniques for extracting and using images – for example for loading to the Encyclopedia of Life (https://www.flickr.com/groups/encyclopedia_of_life) and the Atlas of Living Australia (https://biocache.ala.org.au/occurrences/8cb21942-0b13-493f-ae1d-ee6fd158f758), as well as by Citizen Science Groups developing comprehensive field guides such as to Insects of Australia using tags to group into orders and familes (https://www.flickr.com/groups/oz_insects), Australian Rainforest Trees using complex tagging to use for species identification (https://www.flickr.com/groups/australianrainforestplants/discuss/72157604373025570), and through developing small specialist groups such as for Australian Native Plants (https://www.flickr.com/groups/australian_native_plants) Pseudoscorpions (https://www.flickr.com/groups/719103@N20), Polypores (https://www.flickr.com/groups/390204@N21), Invasive Species (https://www.flickr.com/groups/18983462@N00), Weeds of Australia (https://www.flickr.com/groups/1553999@N21), etc.

I will also explore some options for longer-term archiving of resources such as images on Flickr and other web-hosting sites.

Keywords

Flickr "Citizen Science" image quality

Presenting author

Arthur D Chapman